

EFFECT OF HORMONES 2, 4-D AND KINETIN ON CALLUS PRODUCTION AND HERB VINCA ALKALOID LEVELS PRODUCTION *CATHARANTHUS ROSEUS*

Fariba Soleimani *¹, Reza Zarghami²

1. Faculty of Agriculture, Islamic Azad University, Varamin Branch - Branch, Iran

2. Faculty of Agricultural Biotechnology Institute, Karaj, Tehran, Iran

Fariba_Soleimani@yahoo.com

Rezazarghami2001@yahoo.com

ABSTRACT

Significant anticancer vinca alkaloids medicinal plants such as Vinblastine and Vincristine and high blood pressure, such as Ajmalisin and Serpentine Which today has been extensive research. This study was conducted to evaluate the synthesis Vinblastine and Vincristine and vinca plant callus produced by the laboratory based on two-factor factorial experiment in a completely randomized design with three replicates of 5 Petri dish, the first factor included 2,4-D hormone levels (0 - 0.5-1-1.5-2 milligrams per liter) and the second factor kinetin hormone levels (1, 0 to 0.5- milligrams per liter) has been. The results show that in the laboratory (callus formation), the best treatment is to have the maximum production rate Vinblastine, (Kin1 + 2,4-D 0) with a value of 0.7088 micrograms per gram dry weight and the best treatment is to maximize the production of Vincristine, (Kin1 + 2,4-D 0.5) with a value of 0.7088 micrograms per gram the dry weight was and Stage pot (sprayed seedlings) had the best treatment that the maximum production rate Vinblastine, (Kin0 + 2,4-D 2) with a value of 0.06333 milligrams per gram dry weight and the lowest Vinblastine the control treatment (Kin 0 + 2,4-D 0) with a value of 0.0298 mg per g dry weight were observed.

Keywords: Vinca, anticancer, Vinblastine, Vincristine and 2, 4-D.

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